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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/717,360

11/19/2003

Richard R. Bijjani

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11/07/2005

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EXAMINER

HO, ALLEN C

ART UNIT

PAPER NUMBER

2882

DATE MAILED: 11/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/717,360	BIJJANI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Allen C. Ho	2882	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 18-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 18-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>22092005</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 18-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Peschmann (U. S. Patent No. 5,367,552).

With regard to claim 18, Peschmann disclosed a threat detection system comprising: a communication medium (linking different components in the system); at least one computed tomography (CT) scanner (24) coupled to the communication medium, the CT scanner comprising at least one processor (26) that provide control information for the at least one CT scan (102); and a computer (28), distinct from the CT scanner and coupled to the communication medium, that receives the data from the CT scanner via the communication medium and implements a detection algorithm that performs a threat determination about the object based at least partially on the data (column 6, lines 10-34).

With regard to claims 19 and 20, Peschmann disclosed a threat detection system comprising: a communication medium (linking different components in the system); at least one computed tomography (CT) scanner (24) coupled to the communication medium, the CT scanner comprising at least one processor (26) that controls, at least in part, the at least one CT scan (102); and a computer (28), distinct from the CT scanner and coupled to the communication

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medium, that receives the data from the CT scanner via the communication medium and implements a detection algorithm that processes the data to automatically identify subject matter in the data associated with threat material to facilitate automatically performing a threat determination about the object (column 6, lines 10-34).

With regard to claims 31 and 32, Peschmann disclosed a method of making a threat determination about an object, the method comprising the steps of: (A) performing a computed (CT) scan of the object using a CT scanner (24), the CT scanner comprising at least one processor (26) that controls, at least in part, the CT scan (102); (B) transmitting the data from the CT scanner over a communication medium to a remote computer (28) that is distinct from the CT scanner; and (C) processing the data (reconstructing the object and displaying the object to a human operator), via the remote computer, to automatically identify subject matter in the data associated with threat material to facilitate performing a threat determination about the object (column 6, lines 10-34).

With regard to claims 21, 22, 33, and 34, Peschmann disclosed the threat determination system of claim 19 and the method of claim 31, further comprises a second scanner (24A), wherein the computer receives second data from the second scanner, and wherein the detection algorithm processes the second data to perform the threat determination about the object based partially on the second data.

With regard to claims 23 and 35, Peschmann disclosed the threat determination system of claim 22 and the method of claim 34, wherein the second scanner is a dual energy x-ray device (column 10, line 47-68).

With regard to claims 24 and 36, Peschmann disclosed the threat determination system of claim 22 and the method of claim 34, wherein the second scanner is a line scanning x-ray device (32).

With regard to claims 25, 28, and 37, Peschmann disclosed the threat determination system of claim 22 and the method of claim 34, wherein the data from the CT scanner comprises density information representative of the object (column 7, line 65 - column 8, line 2).

With regard to claims 26 and 38, Peschmann disclosed the threat determination system of claim 25 and the method of claim 37, wherein the second data comprises effective atomic number information representative of the object (column 10, line 47-68).

With regard to claims 27 and 39, Peschmann disclosed the threat determination system of claim 25 and the method of claim 37, wherein the second data comprises mass information representative of the object (column 8, lines 26-40).

With regard to claims 29, 30, 40, and 41, Peschmann disclosed the threat determination system of claim 19 and the method of claim 31, wherein the communication medium comprises an Ethernet link (column 6, lines 4-9).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peschmann (U. S. Patent No. 5,367,552) in view of Guynn *et al.* (U. S. Patent No. 6,437,656 B1).

With regard to claim 1, Peschmann disclosed an explosive detection system comprising: a communication medium (59); an x-ray scanner (24) coupled to the communication medium that scans an object and generates information about the object from the scan; and an external computer (26), located remotely from the device, that receives the information over the communication medium and implements a detection algorithm that processes the information to automatically identify subject matter in the information associated with threat material to facilitate performing a threat determination about the object (column 5, line 67 - column 6, line 34).

However, Peschmann failed to disclose a communication medium that comprises an Ethernet link, and the external computer receives the information over the communication medium via the Ethernet link.

Guynn *et al.* disclosed a slip ring that is capable of high data transmission rate. Guynn *et al.* taught that the slip ring could be interfaced with a Gigabit Ethernet (column 7, lines 39 - 42).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the slip ring disclosed by Guynn *et al.* in the x-ray scanner disclosed by Peschmann, since a person would be motivated to increase the throughput of scanned containers by increasing the data transmission rate from the rotating gantry (43) to the non-rotating portion of the x-ray scanner (column 5, lines 19 - 38). Furthermore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to replace

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the slip ring bus (59) and the SBUS with a Gigabit Ethernet as suggested by Guynn *et al.*, since a person would be motivated to increase the data transmission rate between the x-ray scanner and the external computer.

With regard to claim 42, Peschmann and Guynn *et al.* disclosed the explosive detection system of claim 1, wherein the x-ray scanning device includes a computed tomography (CT) scanner (26).

### ***Response to Arguments***

5. Applicant's arguments filed 25 August 2005 with respect to claims 1, 18, 19, 20, 29, 30, 31, 32, 40, and 41 have been fully considered and are persuasive. The rejections of claims 1, 18, 19, 20, 29, 30, 31, 32, 40, and 41 under 35 U.S.C. 112, first paragraph, have been withdrawn.

6. Applicant's arguments filed 25 August 2005 have been fully considered but they are not persuasive.

With regard to claim 1, the applicants argue that Peschmann failed to teach automatically identify subject matter in the information associated with threat material. The examiner respectfully disagrees. Peschmann specifically disclosed automatic objection identification (column 6, lines 14 - 18) by an external computer (26). A detection algorithm implemented on the computer is described in detail (column 8, lines 12 - 68).

With regard to claims 18, 19, and 31, the applicants argue that the computer (28) disclosed by Peschmann does not implement a detection algorithm that performs a threat determination. The examiner respectfully disagrees. As disclosed by Peschmann, the computer (28) reconstructs the object and displays the object to a human operator to facilitate threat

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determination. The steps of reconstructing the object and displaying the object to a human operator is construed as steps in a detection algorithm, since an algorithm is simply a procedure followed by the computer and the human operator. In this detection algorithm, the threat determination is performed by the human operator.

For the above reasons, the rejections are being maintained.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- (1) Sorenson (U. S. Patent No. 6,735,272 B1) disclosed a system that comprises a plurality of imaging modalities coupled to a computer via a network.
- (2) Acharya *et al.* (U. S. Patent No. 6,298,112 B1) disclosed a system that comprises a plurality of imaging modalities coupled to a computer via a network.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,



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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen C. Ho whose telephone number is (571) 272-2491. The examiner can normally be reached on Monday - Friday from 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached at (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Allen C. Ho  
Primary Examiner  
Art Unit 2882

03 November 2005